DESIGNING AND DELIVERING INTENSIVE INTERVENTIONS

A Teacher's Toolkit

CENTER ON INSTRUCTION

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CONTENTS

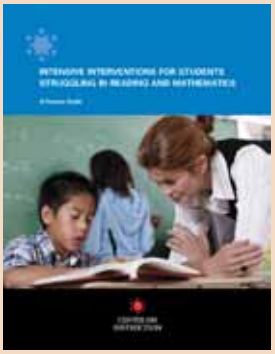
OVERVIEW

Background

This toolkit provides activities and resources to assist practitioners in designing and delivering intensive interventions in reading and mathematics for K–12 students with significant learning difficulties and disabilities. Grounded in research, this toolkit is based on the Center on Instruction's *Intensive Interventions for Students Struggling in Reading and Mathematics: A Practice Guide*.

The practice guide examines four considerations for intensifying interventions:

- supporting cognitive processes,
- differentiating and intensifying instructional delivery,
- increasing instructional time, and
- reducing group size.



This toolkit is based on the Center on Instruction's publication *Intensive Interventions for Students Struggling in Reading and Mathematics: A Practice Guide*. Readers may find it helpful to review that document when preparing to use this toolkit. (www.centeroninstruction.org)

Although progress monitoring of student learning is a critical step when implementing intensive interventions, this topic is outside the scope of the practice guide and, therefore, is not included in this toolkit. For more information about progress monitoring, see the websites of the National Center on Response to Intervention (www.rti4success.org) and the National Center on Intensive Intervention (www.intensiveintervention.org).

Purpose

This toolkit will facilitate the design and delivery of research-based intensive interventions. The tools provide both important information (summarized from *Intensive Interventions for Students Struggling in Reading and Mathematics: A Practice Guide)* and broad guidance to help practitioners learn about, plan for, implement, reflect on, and refine their delivery of intensive interventions. Because this toolkit offers broad guidance in each of these areas, teachers will

likely need to seek out and integrate information from other resources to fully plan and develop intervention lessons.

This toolkit includes the following resources:

- a **professional development activity** that illustrates how to intensify instructional delivery within interventions,
- an **intervention planning worksheet** that (a) guides practitioners through recommendations and considerations for intensifying interventions and (b) asks practitioners to record specific actions they will use to intensify interventions,
- a **lesson reflection template** for teachers to reflect on the instruction they provided during a particular intervention session and outline improvements for subsequent sessions, and
- a **matrix of supplemental resources** that practitioners can consult to extend learning about particular aspects of intensive interventions.

Each tool includes an overview page that describes the tool's purpose, required materials, and instructions for use. Examples of a completed planning worksheet and lesson reflection template have been provided as models; teachers may find these visualizations useful when completing their own planning worksheets and reflection documents.

Intended audience

The toolkit was developed with classroom teachers in mind; however, regional comprehensive centers, state departments of education, and other technical assistance providers might find that the tools and structured activities can make professional development sessions more interactive and dynamic. In addition, teacher educators might apply these activities and tools in their work with pre-service teachers.

Some of the terms used in this publication, such as *cognitive processing*, *executive functions*, and *systematic instruction*, may be unfamiliar to some readers. Although these terms are defined and described in *Intensive Interventions for Students Struggling in Reading and Mathematics: A Practice Guide*, practitioners may benefit from ongoing conversations with technical assistance providers and teacher educators to develop their understanding of these concepts.

Intended use

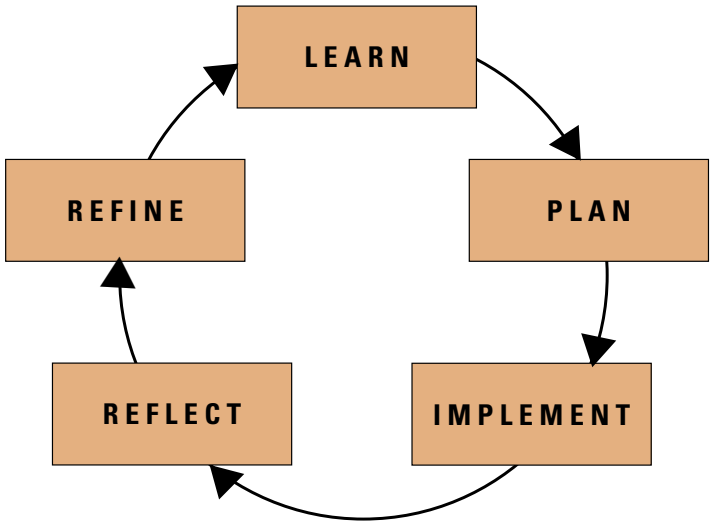
This toolkit includes materials that support the implementation of intensive interventions; users may reproduce these materials as needed. In addition, users can download individual pieces of the toolkit (e.g., worksheets, templates) as electronic files (.docx) from the COI website.

Although related, the tools are distinct and may be used apart from the others. Practitioners may use these tools in one of two ways:

- use select tools independently and integrate them with existing resources and procedures at a campus to meet the unique contextual needs of the school and its students, or
- use all tools in the suggested order presented in the toolkit (see the logic model below). Other existing tools, resources, and procedures at a campus may also be integrated as needed and desired.

Intensive interventions should be conceptualized as a process, not a product. The following logic model depicts such a process for designing and delivering intensive interventions. Similar to the cyclical process used for data-based decision-making, ongoing learning, planning, implementation, reflection, and refinement are essential to effectively designing and delivering intensive interventions for struggling students.

Figure 1: Logic model for designing and delivering intensive interventions



The logic model's application to the design and delivery of intensive interventions, with connections to the appropriate tools included in this document, appears on the next pages.

LEARN

Review and understand research-based information on the design and delivery of intensive interventions.

It is essential that practitioners understand principles related to the effective delivery of instruction, support for students' cognitive processes, and approaches for increasing learning time and decreasing instructional group size. These areas of research are summarized and translated into broad practice guidelines in *Intensive Interventions for Students Struggling in Reading and Mathematics: A Practice Guide.* The authors recommend that practitioners read this guide before using the tools in this toolkit.

The tool: **Professional Development Activity: Learning How to Intensify Instructional Delivery** supports practitioner understanding of intensive interventions.

PLAN

Collaboratively discuss considerations for designing and delivering intensive interventions and draft preliminary plans and action steps.

After practitioners have a solid understanding of what constitutes an effective intensive intervention, they may begin preliminary planning. This planning includes reviewing data for students who have not made sufficient progress in their current interventions and using this information to determine more appropriate intensive interventions.

The tool: **Planning Worksheet: Considerations for Intensifying Interventions** assists educators with initial planning.

IMPLEMENT

Use information collected during the planning process to design and deliver intensive intervention lessons.

Using the information gathered during the collaborative planning process, practitioners can develop lesson plans, adapt current practices, and deliver responsive instruction for struggling students.

Although this toolkit does not include a lesson-planning tool, practitioners can use the Planning Worksheet to identify instructional areas in need of intensification and apply this information to existing lesson-planning templates.

(continued)

REFLECT

Examine the delivery of an intensive intervention lesson, consider its effectiveness, and identify strengths and areas for improvement.

After implementing a carefully designed intensive intervention lesson, practitioners should consider what occurred during the lesson and its effectiveness in meeting students' needs. This reflection should include determining students' level of engagement during the lesson, identifying aspects of the lesson that were successfully intensified, and noting how to improve the lesson.

The tool: **Lesson Reflection Template: Reflecting on the Delivery of Intensive Interventions** assists educators with reflection of their instructional practices.

REFINE

Use information gathered during the implementation of intensive interventions and subsequent reflection to improve instruction.

After initial implementation and reflection, practitioners may discover areas in need of improvement and seek out additional resources for support. Practitioners may need to acquire new information; adjust intervention group size, time, or instructional delivery; implement the refined intervention; and, once again, reflect and refine.

The tool: **Supplemental Resources Guide: Learning More about Intensive Interventions** supports refinement of practice.

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THE TOOLS

LEARN

Professional Development Activity: Learning How to Intensify Instructional Delivery

- Overview page
- Example Lesson 1:
  Less Explicit vs. More Explicit Instruction
- Example Lesson 2:
  Less Systematic vs. More Systematic Instruction
- Example Lesson 3:
  Fewer Opportunities vs. More Opportunities for Response and Feedback

PLAN

Planning Worksheet: Considerations for Intensifying Interventions

- Overview page
- Blank planning worksheet template with example responses

REFLECT

Lesson Reflection Template: Reflecting on the Delivery of Intensive Interventions

- Overview page
- Blank lesson reflection template
- Example of a completed lesson reflection

REFINE

Supplemental Resources Guide: Learning More about Intensive Interventions

LEARN

PROFESSIONAL DEVELOPMENT ACTIVITY: LEARNING HOW TO INTENSIFY INSTRUCTIONAL DELIVERY

Purpose

Teachers can use this professional development activity to learn about intensifying their instructional delivery for students struggling in reading and mathematics. Teachers can complete this activity independently, with a small study group, or as a formal professional development activity led by a facilitator. At the end of this activity, teachers will be able to do the following:

- Make instruction more explicit
- Make instruction more systematic
- Incorporate more opportunities for student response and feedback

Materials

- *Intensive Interventions for Students Struggling in Reading and Mathematics: A Practice Guide*
- Example Lesson 1:
  Less Explicit vs. More Explicit Instruction
- Example Lesson 2:
  Less Systematic vs. More Systematic Instruction
- Example Lesson 3:
  Fewer Opportunities vs. More Opportunities for Response and Feedback

Instructions

- Read pages 17–21 of the practice guide.
- Review, reflect on, and discuss the three sets of lesson examples by doing the following:
  - — Reviewing the less intense version of the lesson

— Answering the guiding questions

— Reviewing the more intense version of the lesson, paying particular attention to the supplemental information on the right side of the page, which highlights specific aspects that make the lesson more effective for students with learning disabilities

— Answering the reflection questions

Example Lessons

These lessons highlight the difference between instructional delivery that is less intense and delivery that is more intense and designed for students with significant learning difficulties. Each pair of lessons focuses on the same feature of effective instruction and includes a less intense version followed by a version adapted to be more intense. These examples do not describe everything a teacher should address in a lesson or intervention session; instead, they are "snapshots" that exemplify making instruction more explicit and systematic and incorporating more opportunities for student response and feedback. In addition, some of the examples include strategies that support cognitive processes (e.g., self-regulation). Instructional practices that make the more intense version of a lesson especially effective for students with learning difficulties are highlighted on the right side of the page.

EXAMPLE LESSON 1:
Less Explicit vs. More Explicit Instruction

Explicit instruction is overt teaching of the steps or processes needed to understand a construct, apply a strategy, and/or complete a task. Explicit instruction includes teacher presentation of new material, teacher modeling, and step-by-step demonstration of what is expected, so that students can accomplish a learning task.

In this lesson, fourth-grade students learn to generate questions about text. Review the less explicit version of the lesson and then answer the guiding questions below.

LESS EXPLICIT INSTRUCTION

1. Tell students that asking questions about the passage during and after reading will help them check their understanding of what they read.
2. Tell students that they will read a passage and generate questions after each section.
3. Have students read the first section of the passage.
4. Ask each student to write a question that can be answered by reading the passage.
5. Have students share their questions and let others in the instructional group provide the answers.

(continued)

GUIDING QUESTIONS

Given this lesson, what might struggling readers find challenging about learning to generate questions?

How could you adapt this lesson to make it more explicit?

(continued)

ADAPTATION

Now, review the lesson on question generation adapted to be more explicit. Pay particular attention to the information on the right-hand side of the page. This text highlights specific aspects that make this lesson more effective for students with learning difficulties.

LESSON ADAPTED TO BE MORE EXPLICIT

1. Tell students that asking questions about a passage during and after reading will help them check their understanding of what they read.
2. Read the first section of the passage together.
3. Model creating a question that can be answered by using information found "right there" in the passage:

Provide a model to make the steps for generating a question explicit for students. In addition, introduce one type of question at a time (e.g., "right there" questions first) to allow students to practice and understand the explicit steps for generating different types of questions.

   a. Identify information from the text and turn it into a question. For example, say: "There is a lot of information about Cam finding the gold ring. I think that might be important. I'll make a 'right there' question. The text tells right there where the gold ring was found, so I'll make a question about that to be sure I can remember.

A think-aloud provides explicit instruction for students regarding what they should think about when completing the task.

   Making a question is difficult for me. I have to remember that I'm starting with the answer or the important information and then consider what question would have the answer. I can do this.

A model of self-talk reminds students to use this self-regulation technique when they work through the task.

   My question is: 'Where did Cam find the gold ring?' I used one of our question words, *where*, to begin my question. Now, I need to check the text to be sure I made a 'right there' question."

(continued)

Have students find the answer in the text. Point out that the question can be answered by using only information from the text.

Engage students in the model and instruction. Here, students have to identify the answer in the text to make explicit the key features of a "right there" question.

4. Continue with other sections of the text, modeling several questions for students.

Provide several models to help students understand how to complete the new task.

5. Have students work in partner groups to select one section of text and generate one "right there" question.

6. Have partners share their question with the group and allow other students in the group to answer the question. Have students determine whether the question is truly a "right there" question and state why. Provide feedback as necessary.

Provide immediate feedback during initial practice attempts to explicitly emphasize the key features of completing the task.

(continued)

REFLECTION QUESTIONS

List at least three ways this lesson was adapted to make it more explicit.

Think about a lesson you recently delivered. How could you have made it more explicit for your struggling students?

EXAMPLE LESSON 2:
Less Systematic vs. More Systematic Instruction

Systematic instruction is complex skills broken down into smaller, manageable "chunks" of learning and requires careful consideration of how best to teach these discrete pieces to achieve the overall learning goal. Systematic instruction includes sequencing learning chunks from easy to difficult and providing scaffolding to control the level of difficulty throughout the learning process.

In this lesson, second-grade students learn to measure to the nearest inch. Review the less systematic version of the lesson and then answer the guiding questions below.

LESS SYSTEMATIC INSTRUCTION

1. Tell students that they will learn to measure things to the nearest inch. Pass out a ruler to each student.
2. Explain to students that if they measure something that ends between two numbers on the ruler, they will use the closest number (nearest inch). Draw a horizontal line on the board that is less than 12 inches long. Tell students that you will use the ruler to measure the line. Point to the end of the line and tell students the nearest inch. Write the number of inches on the board.
3. Demonstrate measuring a different line and ask students to state the measurement to the nearest inch.
4. Provide each student with a sheet of paper with three lines of different lengths drawn on it.
5. Ask students to measure each line to the nearest inch and write the measurement. Check and provide feedback.
6. Ask students to put a writing utensil of their choice on the desk and measure it to the nearest inch. Check and provide feedback.

(continued)

GUIDING QUESTIONS

Given this lesson, what might struggling students find challenging about learning to measure objects to the nearest inch?

How could you adapt this lesson to make it more systematic?

(continued)

ADAPTATION

Now, review the lesson on measurement adapted to be more systematic. Pay particular attention to the information on the right-hand side of the page. This text highlights specific aspects that make this lesson more effective for students with learning difficulties.

LESSON ADAPTED TO BE MORE SYSTEMATIC

1. Tell students that they will learn to measure things to the nearest inch. Pass out a ruler to each student.
2. Draw a large ruler on the board (or show a large classroom ruler). Point to the lines between the numbers on the ruler. Explain to students that if they measure something that ends between two numbers, they will use the closest inch. Point to the longest line between 2 and 3 inches, the 2.5-inch mark. Have students find that line on their rulers. Tell students that if they point before that line, the closest number is 2 and that if they point after that line, the closest number is 3.
3. Repeat the model, using the .5-inch line between 6 and 7 and again between 10 and 11. Each time, have students find the .5-inch line between those numbers on their rulers.
4. Point to a spot between two numbers on the ruler (e.g., between 5 and 6 but closest to 5). Ask students which number/inch is closest. Remind students that because you pointed to a spot before the long line (halfway mark), the number 5 is closest. So, the nearest inch is 5 inches.

Provide instruction in a prerequisite skill for measuring to the nearest inch.

(continued)

5. Point to different points on the ruler between numbers. Have students point to the same spot on their rulers and tell their partner which number is closest. Call on a student to share with the group.	Provide students with opportunities to practice the prerequisite skill to ensure understanding before moving to the next steps in the process.
6. Draw a line on the board that is less than 12 inches long. Tell students that you will use the ruler to measure the line. Do the following to measure and determine the nearest inch: a. Line up the end of the ruler with the end of the line. b. Trace your finger along the ruler until you get to the end of the line. c. Determine which number is closest. d. Record the length of the object to the nearest inch.	Provide students with a step-by-step process for measuring to the nearest inch. Breaking the process into steps can make the process more manageable by providing a scaffold for completing the task.
7. Demonstrate measuring a different line and ask students to tell you whether the ruler lines up with the end of the object. Have students count the numbers with you as you follow along with the ruler to the end of the line. Have students tell you which inch is closest. 8. Demonstrate again, this time measuring a small object instead of a line on the board.	Include the step-by-step process in the model. Model the measurement of both lines and objects because students will be expected to measure both at the end of the lesson.
9. Provide students with a sheet of paper with three lines of different lengths, two spaces to place objects to measure, and the steps for measuring to the nearest inch written on it. 10. Ask students to tell you the first step of measuring to the nearest inch (line up the ruler). Tell students to complete this step for the first line. Check and provide feedback.	Provide scaffolding during initial practice to assist students in remembering the step-by-step process for measuring to the nearest inch.

(continued)

11. Ask students to tell you the second step of measuring to the nearest inch (follow along the ruler to the end of the line and find the closest number). Tell students to complete the second step, counting as they trace their finger along the ruler. Tell students to put their finger on the number that is closest. Check and provide feedback.

12. Ask students to tell you the third step of measuring to the nearest inch (record the length to the nearest inch). Tell students to record the number next to the line. Remind students that the number needs a label. Ask students which label they should use (inches). Tell students to write "inches" next to the number.

13. Repeat steps 10–12 with the second and third lines. Check and provide feedback, prompting when necessary.

14. Tell students they will now measure an object by themselves, just like you showed them earlier. Have students place a writing utensil of their choice on the desk. Ask students to state the first step, second step, and third step of measuring to the nearest inch and then work independently to record their answer. Remind students to assess whether they completed each step of measuring to the nearest inch and to write a checkmark next to each step they complete. Check and provide feedback. Ask some students to demonstrate how they measured their writing utensil.

Slowly fade scaffolding to allow students to take on more of the process independently.

Incorporate self-monitoring to assist students in evaluating their task completion.

(continued)

REFLECTION QUESTIONS

How was this lesson adapted to make it more systematic?

Think about a lesson you recently delivered. What are some ways you could have made the lesson more systematic?

EXAMPLE LESSON 3:
Fewer Opportunities vs. More Opportunities for Response and Feedback

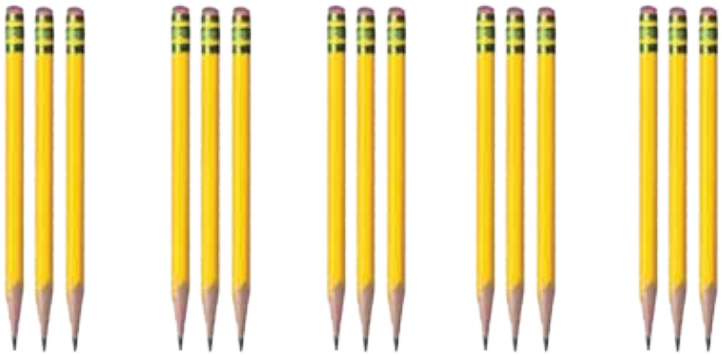
Students with learning difficulties need frequent opportunities to respond and practice with teacher feedback throughout lessons. Providing many opportunities for response and feedback can help teachers monitor student understanding and can help students refine and master new skills (Hattie & Timperley, 2007; Vaughn et al., 2000).

In this lesson, third-grade students are continuing to learn about single-digit multiplication. Review the version of this lesson with few opportunities for response and feedback and then answer the guiding questions below.

FEWER OPPORTUNITIES FOR RESPONSE AND FEEDBACK

1. Write a single-digit multiplication problem on the board (5 x 3) and call on a student to draw a pictorial representation of the problem (5 groups of 3).
2. Provide feedback to the student and explain to the instructional group how the picture represents the multiplication problem.
3. Repeat steps 1 and 2 with several different single-digit multiplication problems, calling on different students each time to draw the pictorial representation on the board.

5 X 3



(continued)

GUIDING QUESTIONS

Given this lesson, what might a struggling student find challenging?

How could you adapt this lesson to incorporate more opportunities for student response and feedback?

(continued)

ADAPTATION

Now, review the lesson on multiplication adapted to increase student response and feedback. Pay particular attention to the information on the right-hand side of the page. This text highlights specific aspects that make this lesson more effective for students with learning difficulties.

LESSON ADAPTED TO PROVIDE MORE OPPORTUNITIES FOR RESPONSE AND FEEDBACK

1. Provide each student with a small dry-erase board and marker (or manipulatives).
2. Remind students of the goal they set to learn single-digit multiplication and to monitor their progress toward that goal in today's lesson (have students record their progress at the end of the lesson).

Incorporate goal setting and self-monitoring of progress toward the goal to increase student attention, motivation, and effort.

3. Write a single-digit multiplication problem on the board (5 x 3) and ask each student to draw a pictorial representation of the problem (5 groups of 3) on their own dry-erase board. Check students' representations as they work and provide feedback.

Using personal dry-erase boards allows all students in the instructional group to practice multiple problems.

4. Ask students to show their picture to their partner and to explain to their partner how their picture represents the multiplication problem. Check the representations and explanations as students work with their partner.
5. Repeat steps 3 and 4 with several different single-digit multiplication problems.
6. Ask a student to write one of the multiplication problems and to draw a picture to represent the problem on the class board. Provide feedback.
7. Ask another student to explain how the picture on the board represents the multiplication problem.

(continued)

REFLECTION QUESTION

In this lesson, the teacher provided dry-erase boards, so all students could practice multiple problems (rather than only one student at a time). Think about a lesson you recently delivered. What are some ways you could have incorporated more student response and provided more feedback?

PLAN

PLANNING WORKSHEET: CONSIDERATIONS FOR INTENSIFYING INTERVENTIONS

Purpose

This activity guides practitioners through a series of recommendations and considerations for implementing intensive interventions with students with learning difficulties and disabilities. Practitioners may complete this activity individually, sharing or discussing with other support personnel as needed, or in a group with all necessary teachers and support personnel. At the end of the activity, practitioners can use the information they discussed and recorded to adapt their practices to deliver appropriate, responsive instruction for students with learning difficulties.

Materials

- Individual student data obtained from screening and/or progress monitoring
- Planning Worksheet (photocopies or a downloaded template for each person)

Instructions

- Review screening and/or progress monitoring data for students who have received supplemental intervention but have not made sufficient progress.
- Read through each recommendation.
- Answer the questions in the shaded boxes and discuss with others as needed. Example responses are provided, including teacher think-aloud notes.

If you need more information to answer a question, consult the Supplemental Resources Guide on page 55 of this toolkit or *Intensive Interventions for Students Struggling in Reading and Mathematics: A Practice Guide.*

If you or teachers with whom you work are unfamiliar with intensifying instructional delivery, it may be helpful to complete the Professional Development Activity: Learning to Intensify Instructional Delivery on page 18 of this toolkit.

RECOMMENDATION 1:
Reduce Instructional Group Size

Ask yourself: Is the instructional group size optimal for learning?

- Consider providing small-group (two to four students) or one-on-one instruction if students do not make sufficient progress in larger groups.
- Design effective instruction to occur within smaller groups to allow for the following:
  - More individualized instruction
  - More student response and practice
- Carefully monitor student progress to determine whether the change in group size improves student outcomes.

Which students need more intensive intervention?

What are the instructional needs of these students?

Based on the information above, list the instructional focus of each group and the students who will participate.

(continued)

EXAMPLE

Teacher Think-aloud

According to progress-monitoring data, I have six students in grades 1–3 who are not making sufficient progress, even though they receive supplemental intervention 2 days a week for 45 minutes each session in groups of eight.

To identify the specific instructional needs of my students, I will refer to my progress-monitoring data.

Which students need more intensive intervention?

Marcus, Jamie, Sandra, Elisa, Joe, Eugene, Julia

What are the instructional needs of these students?

Marcus, Julia, Joe, and Eugene: Fluent with text reading but cannot remember what they read

Sandra and Elisa: Difficulties with word and text reading but have excellent oral listening and comprehension skills

Jamie: Difficulties with word reading, comprehension, and attention

Based on the information above, list the instructional focus of each group and the students who will participate.

Group 1: Comprehension (Marcus, Julie, Joe, Eugene)

Group 2: Word study and text reading (Sandra, Elisa)

Group 3: Word study, comprehension, and self-regulation strategies (Jamie); because of Jamie's very low reading ability and difficulties with attention, she will receive one-on-one instruction

RECOMMENDATION 2: Increase Learning Time

Ask yourself: Do you provide students with adequate instructional time?

- Consider increasing the length and/or frequency of the intervention for students who have not responded to previous interventions.
  - Intensive interventions typically vary in time from 30 to 120 minutes and in frequency from three times per week to two times per day.
  - Provide two shorter sessions per day if scheduling or student engagement is a concern.
- Consider increasing the duration of the intervention for students who have not responded to previous interventions.
  - Students in kindergarten through second grade may achieve positive outcomes with interventions up to 20 weeks long.
  - Students in the upper grades or those several grades behind may require much longer interventions.
- When increasing the intervention length, frequency, and/or duration, consider the following:
  - Student's current grade level and achievement gap
  - Length and frequency of previous interventions
  - Complexity of learning tasks
  - Student's progress, as determined by progress-monitoring checks
  - Degree to which the intervention provider has been trained
- Couple increased learning time with carefully designed instruction to do the following:
  - Teach additional skills and strategies
  - Provide additional practice opportunities with feedback
  - Deliver more explicit, systematic, step-by-step instruction
  - Monitor student progress to ensure that additional learning time increases student mastery of skills

(continued)

Previously, what were the length, frequency, and duration of the previous intervention(s) for each student you listed for Recommendation 1?

What will be the new length, frequency, and duration of each intervention group listed for Recommendation 1?

EXAMPLE

Previously, what were the length, frequency, and duration of the interventions for each student you listed for Recommendation 1?

30 minutes on Monday (M), Wednesday (W), Friday (F) each week for 10 weeks

What will be the new length, frequency, and duration of each intervention group listed for Recommendation 1?

Group 1: Comprehension (Marcus, Julia, Joe, and Eugene)—60 minutes on M, W, F for 20 weeks

Group 2: Word study and text reading (Sandra and Elisa)—60 minutes on M, W, F for 20 weeks

Group 3: Word study, comprehension, and self-regulation (Jamie)—30 minutes in early morning and 30 minutes in early afternoon, daily, for 20 weeks

Teacher Think-aloud

Our school devotes 1-hour blocks daily to intervention, so I will increase the intervention time for groups 1 and 2 to 1-hour sessions 3 days a week for 20 weeks. This increase will double their instructional time. Because I am very concerned with Jamie's reading ability, I will provide her with two sessions per day of 30 minutes each, 5 days a week for 20 weeks. (Two daily sessions may work better than one 60-minute session because she has difficulties with attention.)

I will need to carefully monitor the progress of these students to determine whether the adjustments to instructional time and group size (and instructional delivery) increase the students' rate of learning.

RECOMMENDATION 3: Support Cognitive Processes

Ask yourself: Is instruction responsive to the cognitive processing difficulties of each student?

- Explicitly teach students to use self-regulation strategies (e.g., self-questioning, goal setting).
  - — Introduce the strategy and discuss how it will be useful to students.
  - — Model the strategy through "think-alouds."
  - — Help students memorize the steps in the strategy.
  - — Support students as they practice the strategy (guided practice).
  - — Provide time for independent practice.
- Support students as they use self-regulation strategies.
  - — Monitor students' use of self-regulation strategies.
  - — Determine what strategies students use to solve problems and provide feedback as necessary.
- Teach students to use memory-enhancement strategies, including the following:
  - — Note-taking
  - — Rehearsing information aloud
  - — Mnemonic devices
  - — Graphic organizers and other text organizers
- Provide process-directed feedback that is:
  - — Specific to the task or process
  - — Helpful for students in linking their behavior to outcomes

(continued)

How will you support students' cognitive processes within each intervention group?

EXAMPLE

How will you support students' cognitive processes within each intervention group?

Group 1: Comprehension (Marcus, Julia, Joe, and Eugene)

Explicitly teach the students to self-monitor while they read (e.g., identify when text does not make sense to them, identify words they don't know that prevent comprehension of the sentence or passage).

Incorporate graphic organizers for students to complete and refer to while they read (e.g., recording predictions or questions about the text before they read, generating story maps, recording information to generate a main idea).

Group 2: Word study and text reading (Sandra and Elisa)

As Sandra and Elisa work on increasing their accuracy with word and text reading, I will help them set goals and chart their progress.

Group 3: Word study, comprehension, and self-regulation (Jamie)

Because Jamie is working on improving word reading, fluent text reading, and comprehension, I will use a combination of the self-monitoring and goal-setting strategies used in groups 1 and 2. I will also help Jamie with improving her attention by teaching her ways to self-monitor her behavior.

RECOMMENDATION 4: Intensify Instructional Delivery

Ask yourself: Is your delivery of instruction sufficiently intense to meet the learning needs of struggling students?

- Provide explicit instruction.
  - — State the purpose and learning goal of the lesson.
  - — Provide models with clear, detailed explanations.
  - — Use pictures, graphics, manipulatives, or "think-alouds."
  - — Provide guided practice opportunities.
- Provide systematic instruction.
  - — Break down tasks into smaller steps.
  - — Break down instruction into simpler segments.
  - — Use step-by-step strategies.
  - — Provide temporary support and then gradually reduce that support over time.
- Provide multiple opportunities for student response and feedback.
  - — Offer individual practice opportunities to all students.
  - — Use frequent student response to monitor student understanding.
  - — Provide feedback that relates to student goals and effective completion of tasks.
- Use process-directed feedback with students.
  - — Provide feedback that is clear and precise.
  - — Communicate which aspects of the task students perform correctly.
  - — Connect feedback directly to student actions and learning goals.
- Provide corrective feedback to students after task completion.
  - — Model the task or correct response.
  - — Provide immediate feedback for discrete tasks (e.g., spelling a word).
  - — Provide feedback after a short delay for complex tasks (e.g., writing a paragraph).
  - — Provide additional time to practice tasks that were done incorrectly.
- Incorporate independent practice after students begin to develop mastery of a new skill.

(continued)

How will you intensify and differentiate instructional delivery within each intervention group?

EXAMPLE

How will you intensify and differentiate instructional delivery within each intervention group?

Group 1: Comprehension (Marcus, Julia, Joe, and Eugene)

I will provide explicit instruction on strategies for monitoring comprehension by modeling my use of them with think-alouds to demonstrate each step, provide group practice with teacher support, and provide specific feedback on tasks students do well and those that need improvement.

Group 2: Word study and text reading (Sandra and Elisa)

I will provide explicit, systematic instruction on word study, making sure that I introduce letter/sound rules and combinations in a sequence that makes sense and builds from simple to complex. I also will provide many practice opportunities for applying letter/sound rules and combinations to word and text reading. Sandra and Elisa may also engage in partner reading activities that allow both girls to practice, monitor, and provide feedback on fluent reading of words and text.

Group 3: Word study, comprehension, and self-regulation (Jamie)

I will use the same instructional practices mentioned above for Jamie because she needs instruction in word study, fluent text reading, and comprehension, but she will most likely need to spend more time on each skill and engage in more practice activities than the other students.

REFLECT

LESSON REFLECTION TEMPLATE: REFLECTING ON THE DELIVERY OF INTENSIVE INTERVENTIONS

Purpose

This template provides practitioners with an opportunity to reflect on a lesson delivered during an intensive intervention session. Practitioners should complete this template individually and share or discuss it with other support personnel as needed. At the end of the activity, practitioners can use the information they recorded to improve their instructional practice.

Materials

- Lesson plans from a recently delivered intensive intervention session
- Lesson Reflection Template (photocopies or a downloaded template)
- Example Lesson Reflection Template (completed as a model)

Instructions

- Use the prompts in each section to reflect on a lesson.
- In the space provided, write a description of the instruction, rate the level of satisfaction with implementation, and record ideas for improvement for the next lesson.
- It may be helpful to consult the Example Lesson Reflection Template, which has been completed as a model.

If you need more information to answer a question, consult the Supplemental Resources Guide on page 55 of this toolkit or *Intensive Interventions for Students Struggling in Reading and Mathematics: A Practice Guide*.

If you are unfamiliar with ways to intensify instructional delivery, it may be helpful to complete the Professional Development Activity: Learning How to Intensify Instructional Delivery on page 18 of this toolkit.

Lesson Reflection Template

Intervention Provider:		**Date:**
Intervention Group:	**Length of Session:**	**Number of Students:**
Instructional Focus:		

Reflection Prompts	Description of Instruction	Satisfaction Level			Ideas for Improvement
		Very	Some-what	Not	
How Did I Support Cognitive Processing?					
How did I explicitly teach students to use self-regulation strategies? For instance, did I: • Introduce the strategy and its use? • Model the strategy through "think-alouds?" • Help students memorize the steps in the strategy? • Support students as they practiced the strategy? • Provide time for independent practice?					
How did I support students as they used self-regulation strategies? For instance, did I: • Monitor students' use of the strategies? • Determine what strategies students use and provide feedback as necessary?					

(continued)

Reflection Prompts	Description of Instruction	Satisfaction Level			Ideas for Improvement
		Very	Some-what	Not	
How did I teach students to use memory-enhancement strategies? For instance: • Note-taking • Rehearsing information aloud • Mnemonic devices • Graphic organizers/text organizers					
How did I provide process-directed feedback? For instance: • Feedback that is specific to the task or process • Feedback that helps students link their behavior to outcomes					
How Did I Intensify Instructional Delivery?					
How did I provide explicit instruction? For instance, did I: • State purpose and learning goal of lesson? • Provide models with clear explanations? • Use pictures, manipulatives, or "think-alouds?" • Provide guided practice opportunities?					

(continued)

Reflection Prompts	Description of Instruction	Satisfaction Level			Ideas for Improvement
		Very	Some-what	Not	
How did I provide systematic instruction? For instance, did I: • Break down tasks into smaller steps? • Break down instruction into simpler segments? • Use step-by-step strategies? • Provide temporary support that can be reduced over time?					
How did I provide multiple opportunities for student response and feedback? For instance, did I: • Offer individual practice opportunities to all students? • Use frequent student response to monitor student understanding? • Provide feedback that relates to student goals and completion of tasks?					
How did I use process-directed feedback with students? For instance, did I: • Provide feedback that is clear and precise? • Communicate which aspects of the task students performed correctly? • Connect feedback directly to student actions and learning goals?					

(continued)

Reflection Prompts	Description of Instruction	Satisfaction Level			Ideas for Improvement
		Very	Some-what	Not	
How did I provide corrective feedback to students after task completion? For instance, did I: • Model the task or correct response? • Provide immediate feedback for discrete tasks? • Provide feedback after a short delay for complex tasks? • Provide additional time to practice tasks completed incorrectly?					
How did I incorporate independent practice after students began to develop mastery of a new skill?					

(continued)

OVERALL LESSON REFLECTION QUESTIONS

Did all students appear engaged during the lesson?

In what ways did I successfully intensify the lesson?

How could I have improved the lesson?

EXAMPLE

Lesson Reflection Template

Intervention Provider: Angeline Hurrea		**Date:** 04/25/12
Intervention Group: Comprehension (Group 1)	**Length of Session:** 60 minutes	**Number of Students:** 4
Instructional Focus: Students will preview a narrative text and set a purpose for reading by generating questions they want the text to answer.		

Reflection Prompts	Description of Instruction	Satisfaction Level			Ideas for Improvement
		Very	Some-what	Not	
How Did I Support Cognitive Processing?					
How did I explicitly teach students to use self-regulation strategies? For instance, did I: • Introduce the strategy and its use? • Model the strategy through "think-alouds?" • Help students memorize the steps in the strategy? • Support students as they practiced the strategy? • Provide time for independent practice?	Introduced the story web and explained that we would use it to record our questions. Explained that students will preview the story by reading the title and looking at pictures before reading.		X		Model how to generate a question and record it on the story web before students do. Think aloud about my process for generating a question. Some were confused, even though we did it together.
How did I support students as they used self-regulation strategies? For instance, did I: • Monitor students' use of the strategies? • Determine what strategies students use and provide feedback as necessary?	Led guided practice ("we do") throughout the lesson. Reminded students to look for answers in story as they read.	X			

(continued)

Reflection Prompts	Description of Instruction	Satisfaction Level			Ideas for Improvement
		Very	Some-what	Not	
How did I teach students to use memory-enhancement strategies? For instance: • Note-taking • Rehearsing information aloud • Mnemonic devices • Graphic organizers/text organizers	N/A				
How did I provide process-directed feedback? For instance: • Feedback that is specific to the task or process • Feedback that helps students link their behavior to outcomes	Forgot about doing this! Provided generic feedback like "good job" or "keep trying."			X	Tell students exactly how and why they are doing a good job (e.g., reading text carefully while keeping a question in mind).
How Did I Intensify Instructional Delivery?					
How did I provide explicit instruction? For instance, did I: • State purpose and learning goal of lesson? • Provide models with clear explanations? • Use pictures, manipulatives, or "think-alouds?" • Provide guided practice opportunities?	Discussed importance of reading with a purpose. Explained that we would do a "book walk" and come up with questions that we want the story to answer. Provided guided practice. Supported learning goal with graphic organizer (story web).		X		Model how to generate a question and record it on the story web before students do it. Some were confused about what to do, even though we did it all together.

(continued)

Reflection Prompts	Description of Instruction	Satisfaction Level			Ideas for Improvement
		Very	Some-what	Not	
How did I provide systematic instruction? For instance, did I: • Break down tasks into smaller steps? • Break down instruction into simpler segments? • Use step-by-step strategies? • Provide temporary support that can be reduced over time?	Guided students through each step of instruction: read title, looked at pictures, wrote questions on the story web, read text, and searched for answers.	X			Could review all the questions the students have generated right before reading the text together.
How did I provide multiple opportunities for student response and feedback? For instance, did I: • Offer individual practice opportunities to all students? • Use frequent student response to monitor student understanding? • Provide feedback that relates to student goals and completion of tasks?	Students were engaged during all practice opportunities (each student was responsible for generating questions). All students read text aloud.		X		Provide more specific feedback to each student (see below).
How did I use process-directed feedback with students? For instance, did I: • Provide feedback that is clear and precise? • Communicate which aspects of the task students performed correctly? • Connect feedback directly to student actions and learning goals?	Forgot about doing this!			X	Provide feedback to students while they are engaged in the process of generating questions and reading for the purpose of answering those questions (e.g., read text carefully while keeping a question in mind).

(continued)

Reflection Prompts	Description of Instruction	Satisfaction Level			Ideas for Improvement
		Very	Some-what	Not	
How did I provide corrective feedback to students after task completion? For instance, did I: • Model the task or correct response? • Provide immediate feedback for discrete tasks? • Provide feedback after a short delay for complex tasks? • Provide additional time to practice tasks completed incorrectly?	Because students were engaged in guided practice, immediate feedback was provided to each student after they generated a question or answered a question on the story web. If questions were answered incorrectly, I provided feedback to help them reread text.	X			
How did I incorporate independent practice after students began to develop mastery of a new skill?	N/A (The purpose of this lesson was to introduce how to use a story web to help students keep track of questions and read for a purpose. Students will be ready for independent practice after a few more sessions.)				

(continued)

OVERALL LESSON REFLECTION QUESTIONS

Did all students appear engaged during the lesson?

All students appeared engaged during the lesson—they really seemed to enjoy using the graphic organizer! Reminding students to find the answers to the questions they had generated really made them active readers.

Marcus had the most difficulty developing questions and staying on task while reading. I may need to provide additional scaffolding and practice opportunities for him.

In what ways did I successfully intensify the lesson?

Previously, these students were in a larger intervention group and had only 30 minutes per session. By reducing the group size, I was able to give each student more attention and provide supports. The extended time allowed me to provide even more practice opportunities for each student, which really seemed to make a difference.

How could I have improved the lesson?

Overall, I need to do a better job of connecting my feedback to the learning goals of the lesson and providing specific feedback rather than general praise or corrections. I think this type of feedback may accelerate students' learning because they will know exactly what they are doing well and what they need to work on.

Also, although I provided students with multiple opportunities for practice during the guided practice time, I think students would enjoy working in pairs, which would increase their opportunities for practice even more. I may provide one more session where we generate questions and read for answers together, and then I will be able to let them practice in pairs while I monitor for understanding. After that, students can engage in independent practice.

REFINE

SUPPLEMENTAL RESOURCES GUIDE: LEARNING MORE ABOUT INTENSIVE INTERVENTIONS

Intensive Interventions for Students Struggling in Reading and Mathematics: A Practice Guide provides general practice guidelines for adapting instructional practices to respond to the complex needs of students with learning difficulties. In addition to that publication, the helpful resources in the following list can expand understanding of delivering relevant, intensive, individualized instruction to students.

Resources are listed in alphabetical order and include the following:

- Title
- Hyperlink
- Brief description
- Developer organization (the symbol indicates resources the Center on Instruction developed)
- Format (e.g., PDF, PowerPoint, online module)
- Topics addressed

Resource Information	Supporting Cognitive Processes	Intensifying Instructional Delivery	Increasing Instructional Time	Reducing Group Size	Reading	Math	Writing
Cognitive Strategy Instruction http://cehs.unl.edu/csi **Description:** This website provides information about strategy instruction in reading, writing, mathematics, study skills, and self-regulation. **Organization:** University of Nebraska-Lincoln **Format:** Website; includes downloadable lesson plans	✓				✓	✓	✓
CSR: A Reading Comprehension Strategy (Star Legacy Module) http://iris.peabody.vanderbilt.edu/csr/chalcycle.htm **Description:** This online Star Legacy module demonstrates how Collaborative Strategic Reading (CSR) can be used to support reading comprehension. **Organization:** IRIS Center for Training Enhancements **Format:** Online module; includes video clips	✓				✓		
Doing What Works http://dww.ed.gov **Description:** This website provides teachers with support in the implementation of effective instructional practices, including interventions for students struggling in reading and mathematics. **Organization:** Office of Planning, Evaluation, and Policy Development, U.S. Department of Education **Format:** Website; includes videos, interviews, research summaries, and downloadable materials		✓			✓	✓	

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Effective Instruction for Adolescent Struggling Readers – Second Edition www.centeroninstruction.org/effective-instruction-for-adolescent-struggling-readers---second-edition **Description:** This set of resources provides guidance on the implementation of reading interventions for students in grades 4–12. It includes a meta-analysis, practice guide, and professional development materials. **Format:** PDF, PowerPoint		✓			✓		
Extensive Reading Interventions in Grades K–3: From Research to Practice www.centeroninstruction.org/extensive-reading-interventions-in-grades-k-3-from-research-to-practice **Description:** This report summarizes 12 peer-reviewed, high-quality research studies between 1995 and 2005 and synthesizes their findings on the effects of extensive reading interventions (comprising at least 100 instructional sessions) for struggling K–3 readers. It then explains the related implications for practice for students with reading problems or learning disabilities in a response to intervention (RTI) setting. **Format:** PDF; webinar also available		✓	✓	✓	✓		

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Intensive Reading Interventions for Struggling Readers in Early Elementary School: A Principal's Guide www.centeroninstruction.org/intensive-reading-interventions-for-struggling-readers-in-early-elementary-school-a-principals-guide **Description:** This guide provides information critical to developing and implementing an effective school-level intervention program. It suggests guiding principles and examples of how to operationalize these principles to develop an effective school-level system for meeting the instructional needs of all students. **Format:** PDF; webinar also available			✓	✓	✓		

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Resource Information	Supporting Cognitive Processes	Intensifying Instructional Delivery	Increasing Instructional Time	Reducing Group Size	Reading	Math	Writing
Mathematics Instruction for Students with Learning Disabilities or Difficulty Learning Mathematics: A Guide for Teachers www.centeroninstruction.org/mathematics-instruction-for-students-with-learning-disabilities-or-difficulty-learning-mathematics-a-guide-for-teachers **Description:** This guide for teachers is a companion piece to a meta-analysis from the Center on Instruction, Mathematics Instruction for Students with Learning Disabilities or Difficulty Learning Mathematics: A Synthesis of the Intervention Research. This report identified seven effective instructional practices for teaching mathematics to K–12 students with learning disabilities. It describes these practices and, incorporating recommendations from The Final Report of the National Mathematics Advisory Panel, specifies research-based recommendations for students with learning disabilities and for students who experience difficulties in learning mathematics but are not identified as having a mathematics learning disability. **Format:** PDF						✓	

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Organizing Instruction and Study to Improve Student Learning http://ies.ed.gov/ncee/wwc/pdf/practiceguides/20072004.pdf **Description:** This guide includes a set of concrete actions relating to the use of instructional and study time that are applicable to subjects that demand a great deal of content learning, including social studies, science, and mathematics. The guide was developed with some of the most important principles to emerge from research on learning and memory. **Organization:** National Center for Education Research, Institute of Education Sciences **Format:** PDF	✓					✓	
Principles of Effective Instruction and Intervention www.fcrr.org/interventions/recreading.shtm **Description:** This webpage is a list of references for resources that support effective reading instruction and intervention. **Organization:** Florida Center for Reading Research **Format:** Webpage; includes list of references		✓		✓	✓		

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Project Write www.kc.vanderbilt.edu/projectwrite **Description:** This website provides lesson plans and support materials for story and persuasive writing strategies to improve the writing and self-regulation behaviors of students in early elementary grades (1–3). **Organization:** Project Write **Format:** Website; includes lesson plans	✓						✓
RTI (Part 5): A Closer Look at Tier 3 (Star Legacy Module) http://iris.peabody.vanderbilt.edu/rti05_tier3/chalcycle.htm **Description:** This online Star Legacy module provides information about Tier 3 intervention in an RTI model. **Organization:** IRIS Center for Training Enhancements **Format:** Online module; includes video clips		✓	✓	✓			
SOS: Helping Students Become Independent Learners (Star Legacy Module) http://iris.peabody.vanderbilt.edu/sr/chalcycle.htm **Description:** This online Star Legacy module describes self-regulation strategies, including self-monitoring, self-instruction, goal setting, and self-reinforcement. **Organization:** IRIS Center for Training Enhancements **Format:** Online module; includes video clips	✓						

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SRSD: Using Learning Strategies to Enhance Student Learning (Star Legacy Module) http://iris.peabody.vanderbilt.edu/srs/chalcycle.htm **Description:** This online Star Legacy module provides information about strategy instruction, including the Self-Regulated Strategy Development (SRSD) model. **Organization:** IRIS Center for Training Enhancements **Format:** Online module; includes video clips	✓						
Synopsis of "Improving Comprehension of Expository Text in Students with Learning Disabilities: A Research Synthesis" www.centeroninstruction.org/synopsis-of-improving-comprehension-of-expository-text-in-students-with-learning-disabilities-a-research-synthesis **Description:** This synopsis discusses the results of a synthesis of 29 studies that addressed instructional approaches for enhancing reading comprehension and their implications for helping students with learning disabilities improve their reading comprehension in content-area instruction. The authors describe two main types of interventions: content enhancement and cognitive strategy instruction, both found to be highly effective in this population. **Format:** PDF	✓				✓		

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A Synopsis of "The Power of Feedback" www.centeroninstruction.org/a-synopsis-of-the-power-of-feedback **Description:** This synopsis highlights findings from a synthesis of research that examined feedback as an instructional strategy, reviews the evidence related to its impact on learning, and suggests applications in the context of overall classroom instruction as well as interventions with students who are struggling or who have learning disabilities. **Format:** PDF	✓	✓					
A Synopsis of "A Synthesis of Empirical Research on Teaching Mathematics to Low-Achieving Students" www.centeroninstruction.org/a-synopsis-of-a-synthesis-of-empirical-research-on-teaching-mathematics-to-low-achieving-students **Description:** This synopsis highlights key findings from a synthesis of research on interventions for struggling mathematics students. Baker, Gersten, and Lee (2002) synthesized findings from 28 years of research on interventions for students struggling with learning mathematics. **Format:** PDF; webinar also available						✓	

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Synopsis of "Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High School" www.centeroninstruction.org/synopsis-of-writing-next-effective-strategies-to-improve-writing-of-adolescents-in-middle--high-schools **Description:** This synopsis distills the findings reported in Writing Next, with special attention to findings for students with learning disabilities. It identifies 11 instructional strategies, listed in decreasing order of effect size. Although writing has received less attention than reading, it is a critical aspect of literacy and one in which effective instructional techniques and intervention models are needed. **Format:** PDF; webinar also available	✓						✓

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Using Student Center Activities to Differentiate Reading Instruction: A Guide for Teachers www.centeroninstruction.org/using-student-center-activities-to-differentiate-reading-instruction-a-guide-for-teachers **Description:** This guide describes a wide range of student center activities to engage students in differentiated reading activities during small-group work. The activities target specific skills, scaffold student learning, and provide engaging practice to extend student learning and increase the time focused on critical reading skills at all levels of reading proficiency. Originally prepared for use in Florida schools, these activities are appropriate in any elementary school context and are consistent with scientific research on reading instruction. **Format:** PDF				✓	✓		

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